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A. F. Schalk

Ohio State University, Columbus

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Veterinary Preventive Medicine

Important phase of veterinary medicine needs attention

A. F. Schalk, D.V.M.*

FOR centuries the clinical and "curative" conception of medicine has dominated medical thought and procedure, practically to the exclusion of all other phases of this great art and science. It has been so uppermost in the minds of most medical authorities until quite recently that they were and many are today almost entirely oblivious to other potent measures and practices that so materially contribute to the well-being of the animal organism. Thus our domain of service has been rather strictly confined to diagnosing, prescribing and administering to animals in which a pathological state actually exists. At the same time the major problems of prevention, control, suppression, and possible eradication of disease have been blissfully ignored. This condition still exists in spite of the fact that more than three-quarters of a century of scientific research with its wealth of dependable data and derived fundamental principles has established a sound basis for the field of Veterinary Preventive Medicine. Today this should be as accurate a field of scientific endeavor as that of any other branch of veterinary medicine. Yet regrettably, the fact remains that applied scientific hygiene and preventive medicine have not kept abreast with the needs and trends of our profession.

Our delinquency in advancing the preventive aspects of Veterinary Medicine can be attributed to several existing states, mainly (1) lack of a comprehen-

sive grasp and a clear perspective of its value and importance, (2) fear of sacrificing professional ideals and relationships with accompanying reduced remuneration, and (3) failure of our institutions to furnish fundamental and systematic instruction on the subject in impressive manner to students in academic training.

Role of Livestock

Failure on the part of the veterinarian to recognize the value and importance of preventive medicine relates to his inability to evaluate its worth to the livestock industry. Whereas the destiny of our profession depends upon the trends of the economics of the livestock industry we cannot afford to complacently ignore its welfare. The fact that the livestock industry and veterinary medicine are interdependent upon one another is readily understood. But it should not be forgotten that the livestock industry represents the stellar role and veterinary medicine merely the supporting cast in this great agricultural drama. It is feasible to suppose that without our assistance the livestock industry could still limp along but, contrarily, veterinary medicine without animal husbandry would readily become practically non-existent. Although our profession is subordinate to the industry in this mutual relationship it is, however, absolutely essential to a profitable and productive husbandry. Therefore we have a fundamental mission to perform and our problem is, how can we best accomplish this mission to insure an enduring

*Professor of Preventive Medicine, Ohio State University, Columbus, Ohio.

animal industry and at the same time build and maintain a worthy veterinary profession that is indispensable to a permanent and profitable animal industry.

Fear of sacrificing professional ideals and relationships with accompanying reduced remuneration is another stigma on our profession which traces back to the days of "quackery." It should now be realized that dissemination of knowledge of the proper kind tends toward more proficient and lucrative results. The modern keynote of our profession should be the divulgence of sound advice on practical hygienic and preventive measures to our clientele for the betterment of their flocks and herds.

Many are the situations in which the veterinarian can effectively advise the stockman as to the feeding, housing, pasturing, and general care and management of livestock. This information would stimulate the stockman's understanding of animal health problems and develop him into a more efficient co-operator in times of actual disease. Benefits from such co-operation between the veterinarian and his client will soon manifest themselves. In the stockman there is instilled a more enduring confidence in veterinarians in general based on a fuller appreciation of their sincere and earnest services. This will inevitably lead to new and additional business for the veterinarian which should dispel any false fears of possible decreased remuneration for noble endeavors on his part.

Need for Instruction

Therefore, instead of sacrificing professional ideals and relationships, the veterinarian will create and promote higher ideals, establish stronger bonds with the livestock fraternity, render a more varied and efficient type of service and increase his remuneration for his services.

Probably the basic reason for delinquency in fostering and promoting preventive medicine as a fundamental part of veterinary medicine rests with the failure of our institutions to furnish adequate and systematic instruction on the subject to students in academic training.

Primarily this failure has been due to our lack of comprehension of the need and demand for preventive medicine rather than to the lack of information on the subject.

Years of scientific research in medicine and allied fields have seen the accumulation of vast stores of valuable information and workable data that form the basis for the birth and development of preventive medicine. True, the knowledge is not complete but there is sufficient to be seriously fostered and its necessity demands that it not be ignored. For the most part preventive medicine has not enjoyed a vigorous and substantial growth in our colleges because clinical medicine has so thoroughly and completely dominated our veterinary curriculum. Thus we have allowed it to straggle along in a half-neglected status for years unmindful of the consideration it deserves.

Teaching Students

For a long time human medicine fared no better. However, a few farsighted medical men championed the cause and preventive medicine today enjoys a significant position in practically every first class medical school curriculum. But veterinary medicine has not been as progressive. Unfortunately we persist in our half-hearted attitude toward this important field while its scope, need and importance thoroughly warrant that it be made an integral part of the veterinary curriculum. This can only be done by the establishment of a separate and distinct department of Veterinary Preventive Medicine correlative with other departments of the college. Such organization would permit the department to formulate and project into the curriculum, as required subjects, systematic courses in hygiene, preventive medicine and sanitary science. This would mean objectivity and methodology toward a specific end.

The object of this branch of medicine should be to make the student conscious of preventive medicine and familiar with its role in modern practice. He must be taught the fundamental biological principles that will give him a workable per-

spective of this field. In the past our teaching has widely missed this mark. Too often the academic instruction has been limited in scope, and only fragmentarily or incompletely presented. The old plan of presenting only a few orthodox lectures on the subject from some incomprehensive text without specific practical references and clinical aspects, should be discarded. Its continuation will interfere with the progressive program.

Curriculum Outlined

To be most effective the Department of Preventive Medicine should have the support and co-operation of other faculties in the veterinary college. It is not possible for one department alone to confer the required interest and purpose of preventive medicine. Therefore its constructive thought and spirit should pervade practically all branches of the curriculum and should emanate forcibly from all. The various phases of livestock development and reproduction are carried directly and intimately into all phases of veterinary medicine as now established in the curriculum. Thus there are presented innumerable opportunities for the obstetrician, physiologist, bacteriologist, pathologist, immunologist, surgeon, pharmacologist and food hygienist to make references and suggestions of a preventive nature to the student who may pass them on to his clients when he graduates. With this substantial backing the Department of Preventive Medicine equipped and staffed by efficient personnel can attain the desired results. It is the function of this department to present the hygiene, preventive medicine, and sanitary science, including all fundamentals that have not been taught in allied subjects and the practical applications of preventive medicine in all its ramifications.

Justification

Attainment of our goal in the promotion of preventive medicine depends to a great measure on the attitude and co-operation of the veterinary colleges. With earnest endeavor guided by a separate and distinct department maintaining

ideals, standards and specific courses on the same basis as the established sciences, it should flower into a new highly essential field. Thus preventive medicine if properly nurtured and promoted will enrich veterinary education and ultimately demonstrate its justification by the advancement of the animal industry and consequently the veterinary profession.

Export of semen by air express is a postwar development promising added income for livestock breeders and a lucrative outlet for veterinary services.

It appears ever so much more practical to transport refrigerated semen samples to Europe in a matter of hours rather than water freight on sires that may weigh a ton or more. Furthermore, shipment of semen rather than sires is less hazardous and minimizes risks of disease losses.

This new phase of livestock breeding may be an actuality sooner than we at present realize. For this reason alone, all practitioners should acquaint themselves with accepted technics for procuring semen samples and with artificial insemination. Such information in abridged form may be obtained by writing for U. S. Department of Agriculture Circular 567.

—Jen Sal Journal

Russia has devised means of coordinating cavalry and tank attacks which make the cavalry very effective against enemy front lines and communications.

Dr. Theobald Smith once said, "Nature not only abhors a vacuum, but she also abhors a crowd." The veterinarian must keep this aphorism in mind in practicing sanitation and hygiene. As the number of animals in a group is increased, the disease hazards increase in direct proportion.

Passing a stomach tube into the trachea of a mare will prevent the animal from straining against the operator while the fetus is being manually delivered.